

CLAIMS

1. An interactive system by which to convert drug and medical specific information relating to information events, content and object data generated by an on-line drug and medical information system into interactive voice communications for transmission to a user, said interactive system comprising:

5 an application system to receive the drug or medical specific information generated by the on-line drug and medical system and to convert said drug and medical specific information into voice content and instructions;

a telephony/voice system to receive the voice content and instructions produced by said application system and to generate an interactive voice response to said voice content and
10 instructions;

a telecommunications network by which to transmit the interactive voice response generated by said telephony to the user; and

a telephone at which the user receives the interactive voice response transmitted by said telecommunications network.

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2. The interactive system recited in Claim 1, wherein said telecommunications network is one of a cellular telephone network, a mobile telephone network, a satellite telephone network, or a public switched telephone network.

20 3. The interactive system recited in Claim 1, wherein said telephone of the user is one of a mobile telephone, a cellular telephone, a terrestrial telephone, or a satellite telephone.

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1. An interactive system by which to convert drug and medical specific information relating to information events, content and object data generated by an on-line drug and medical information system into interactive voice communications for transmission to a user, said interactive system comprising:

5 an application system to receive the drug or medical specific information generated by the on-line drug and medical system and to convert said drug and medical specific information into voice content and instructions;

a telephony/voice system to receive the voice content and instructions produced by said application system and to generate an interactive voice response to said voice content and
10 instructions;

a telecommunications network by which to transmit the interactive voice response generated by said telephony to the user; and

a telephone at which the user receives the interactive voice response transmitted by said telecommunications network.

15 2. The interactive system recited in Claim 1, wherein said telecommunications network is one of a cellular telephone network, a mobile telephone network, a satellite telephone network, or a public switched telephone network.

20 3. The interactive system recited in Claim 1, wherein said telephone of the user is one of a mobile telephone, a cellular telephone, a terrestrial telephone, or a satellite telephone.

4. The drug and medical information system recited in Claim 4, wherein said telephony/voice system has means communicating with said application system by which to receive an outbound call instruction and thereby initiate an outbound call to the telephone of the user by way of said telecommunications network, said telephony/voice system also having means by which to accept an inbound call from the telephone of the user by way of said telecommunications network.

5. The drug and medical information system recited in Claim 4, wherein the means of said telephony/voice system to accept an inbound call from the telephone of the user is responsive to at least one of the voice of the user or audio tones (DTMF) generated by the user on the telephone of the user.

6. The interactive system recited in Claim 5, wherein the means of said telephony/voice system to accept an inbound call that is responsive to at least one of the voice of the user or the audio tones generated on the telephone of the user is a speech/DTMF recognition engine that is adapted to convert the user's voice and the audio tones into corresponding voice/DTMF commands.

7. The interactive system recited in Claim 6, wherein said telephony/voice system also includes a voice instructions interpreter interconnected between said speech/DTMF engine and said application system so as to receive said voice/DTMF commands and to provide to said application system corresponding response instructions to be delivered from said application

system to the on-line drug and medical information systems as information instructions.

8. The interactive system recited in Claim 7, wherein said telephony/voice system also includes a speech/text-to-speech engine communicating with said voice instruction interpreter, said voice instruction interpreter receiving the voice content and instructions produced by said application system and generating voice output instructions in response thereto, said speech/text-to-speech engine receiving said voice output instructions and transmitting to said telecommunications network understandable human speech that is based on said voice output instructions generated by said voice instruction interpreter.

9. The interactive system recited in Claim 7, wherein said application system includes an application service that is adapted to convert the response instructions provided by the voice instruction interpreter of said telephony/voice system into information instructions to be delivered to the on-line drug and medical information system.

10. The interactive system recited in Claim 9, wherein the application service of said application system generates said outbound call instruction to said telephony/voice system to initiate the outbound call to the telephone of the user, whereby to cause the drug and medical specific information from the on-line drug and medical information system to be transmitted to the user as understandable human speech.

11. The interactive system recited in Claim 9, wherein said application system also includes an application database communicating with said application service to provide information to

and receive information from said application service.

12. The interactive system recited in Claim 1, wherein the drug and medical information specific information received by said application system and converted to voice content and instructions includes at least some of a description of drug or medical items, a user profile containing drug and medical items, notice of new profile event information, the current status of account, and advertising related events.

13. An interactive system by which to convert on-line drug and medical information event information corresponding to drug and medical service provider events, content and object data into understandable human speech to be presented to a user and to convert speech and/or DTMF audio generated by the user into information commands to be routed to an on-line drug and medical information system in response to the drug and medical service provider event information, said interactive system comprising:

means to receive the drug and medical event information from the on-line drug and medical information system;

means to convert the drug and medical event information into interactive responses as understandable human speech to be presented to the user;

a telephony network to deliver said interactive responses to the user; and

means communicating with said telephony network for converting the speech and/or DTMF audio response generated by the user into the information commands to be routed to the on-line drug and medical information system.

14. The interactive system recited in Claim 13, wherein the means to convert the drug and medical information event information into interactive responses as understandable human speech to be presented to the user is a speech/text-to-speech engine.

5 15. The interactive system recited in Claim 14, wherein the means to convert the drug and medical event information into interactive responses also includes a voice instruction interpreter communicating with said speech/text-to-speech engine to provide voice output instructions to said speech/text-to-speech engine corresponding to the drug and medical event information received from the on-line drug and medical information system.

10 16. The interactive system recited in Claim 15, wherein said means communicating with said telephony network for converting the speech and/or DTMF audio responses generated by the user into information commands includes a speech/DTMF recognition engine communicating with said voice instruction interpreter so as to provide to said voice instruction interpreter
15 voice/DTMF commands corresponding to said speech and/or DTMF audio responses generated by the user, said voice instruction interpreter providing output information in response to said voice/DTMF commands to be routed to the on-line drug and medical information system as information commands.

20 17. The interactive system recited in Claim 13, further comprising call initiation means adapted to receive outbound call instructions and thereby initiate a call to the user by way of said telephony network so that the drug and medical event information can be transmitted to the user.

18. A method for converting drug and medical specific information relating to at least some of drug and medical service provider events, content and object data into interactive voice responses to be delivered to a user, said method comprising the steps of:

generating electronic data packets containing the drug and medical specific information
5 obtained from a source of said information at an on-line drug and medical information system;

converting the data packets into corresponding voice content and instructions;

generating an interactive voice response to said voice content and instructions;

generating an interactive voice response to said voice content and instructions as
understandable human speech;

10 transmitting said interactive voice response to a telecommunications network; and

delivering said interactive voice response to the user by way of said telecommunications
network.

19. The method recited in Claim 18, including the additional steps of:

15 producing a user generated voice and/or audio (DTMF) signal in reply to said interactive
voice response delivered to the user;

transmitting said user generated voice and/or audio signal from the user by way of said
telecommunications network;

receiving and converting said user generated voice and/or audio signal into electronic
20 information instructions; and

routing said information instructions to the on-line drug and medical information system.

20. The method recited in Claim 18, wherein the step of generating an interactive voice

response to said voice content and instructions is accomplished by means of a voice instruction interpreter to receive said voice content and instructions and to provide corresponding voice output instructions, and a speech/text-to-speech engine communicating with said voice instruction interpreter to receive said voice output instructions and to provide said interactive
5 voice response as understandable human speech.